

Stony Brook University in the High School

A proposal for college level courses in Marine Science in the High School

Submitted to

The Undergraduate Council of the Stony Brook University Senate

by

Mary I. Scranton, Professor
Undergraduate Director
mscranton@notes.cc.sunysb.edu
2-8735

Preface: Many high schools currently offer college level courses to their students in formats ranging from AP courses to courses taught by college instructors to courses taught at the high school which have been approved by a specific college for college credit. Smithtown High School teachers contacted faculty at MSRC to inquire whether they could offer two college level marine sciences courses to their students under the auspices of Stony Brook University. These courses have been offered in the past as Southampton College courses, and with the closure of Southampton College, a new home for these courses was desired. As we discussed this option, it was clear that, in order to get Undergraduate Council and University Senate approval for such an option, we needed to develop a procedure by which appropriate oversight of college courses taught in high schools could be assured.

Such high school/university courses are not new. The program at Smithtown High School was operated in conjunction with Southampton College for twenty years before Stony Brook University took over the marine sciences program. Presently, Smithtown High School offers a number of courses (although not in marine science) in collaboration with SUNY Farmingdale. It also offers college level programs through the University at Albany and Syracuse. In the marine sciences, 180 students are enrolled in The Oceans and 170 registered for Marine Ecology at Smithtown HS. Note that there is no AP option in Marine Sciences.

Stony Brook currently offers college level classes at two other high schools, Brentwood and Sayville (GEO 121). In addition, there are many other, long-standing programs in New York as well as in other states. Syracuse University has been offering such courses for 35 years. Their "Project Advance" offers 24 college courses in 125 high schools in 5 states to some 4,500 students annually. The University of Albany also has been offering courses in 24 disciplines for 23 years in 300 high schools to some 10,000 students. Indiana University, the Universities of Oregon, North Carolina at Greensboro, the University of Pittsburgh and the University of Minnesota-Duluth, to name a few, offer college-credit courses in high schools. Thus this is a legitimate, popular and productive service of any university. Stony Brook should be responsive to an existing regional demand.

Special considerations:

The "Ocean" course will be offered as a special section (restricted to high school students) of our existing course, MAR 104: Oceanography. As such, FTE would be assigned to MSRC. If the present proposal is acceptable, a similar course will be created in Marine Ecology. "The Ocean" and "Marine Ecology" courses that would be offered at Smithtown would be the equivalent of introductory level science classes offered to non-science majors at the University. The content and expectations of a high-school-taught college level course must meet expectations for university credit. A special schedule would be established, however, for the courses. These would be equivalent to a one-semester, three-credit University course, but taught over the 10-month, high school

academic year. As a practical matter, it is difficult to enroll high school students into fall-semester university courses. It takes time to make students and parents aware of the opportunity, understanding the level of commitment and value. This can usually be accomplished in October, but not earlier. The Smithtown High School would enroll students into a marine science class which meets 40 minutes, five days a week, for the entire school year. While each session may be shorter, the course would be equivalent to approximately 135 contact periods at 40 minutes, or 108 contact hours, compared to the 48 hours of classroom instruction in most three-credit college courses. Grades for the University course would be submitted in mid-May, before the end-of-term for high schools in June. The traditional semester college course would be offered over a high school calendar in order to address both the logistics of student enrollment and timely submission of grades. For example, Forensics Science (Project Advance) is a semester course at Syracuse University that is offered over a year at the high school. Registration and payment is completed in October and high school teachers submit their grade sheets to Syracuse University in time for the end of Spring Semester at Syracuse.

Tuition of \$100 per course will be charged. The course would be administered under the University's existing and successful Young Scholars Program which already offers some two dozen university courses to high school students. Pre-requisites would require students (a) to be Juniors or Seniors, (b) to maintain a B average (c) and to obtain permission of the instructor-of-record (a University faculty member) requiring an adequate letter of recommendation from at least one high-school instructor. Students would be part-time, non-matriculated students of the University. To receive university credit, students would:

- a. Participate in assignments.
- b. Attend field experience activities
- c. Submit projects/papers in the course
- d. Take University generated or University approved exams
- e. Maintain a B average in the Oceans or Marine Ecology course in order to earn college credit

The academic content and instruction of the course will be the responsibility of the Dean-and-Director of Marine Sciences Research Center, in the same way that is true for all of our courses. Each course would have an Instructor-of-Record from the faculty of the MSRC. If possible the instructor-of-record would meet with the adjuncts the previous May or June to review the course syllabus and grading policy. During the course, the instructor-of-record would need to approve all examinations before they are given and receive periodic progress reports on grading. The instructor-of-record would be available at any time to discuss problems or answer questions, but the day-to-day progress of the course would be the responsibility of the adjunct instructors. If possible, we suggest the instructor-of-record meet with the class at least three times during the course—at the beginning of the course in October, for a mid-term assessment in January and near the end of the course early in May. During these visits, the instructor-of-record would lecture on a current topic or lead a field trip and provide an opportunity for students to ask questions. Adjunct instructors would submit the final grades the instructor-of record who would approve them and subsequently submit them to the Registrar.

The MSRC instructor-of-record would be responsible for insuring that the proposed adjuncts were suitable. Adjunct instructors would be reviewed and approved by the same formal departmental process used by MSRC for all adjunct instructor appointments which involves review of resumes, transcripts and letters of recommendation to the University submitted by each candidate. The high-school instructor would be appointed as an unpaid, adjunct instructor of the Marine Sciences Research Center at Stony Brook University. Often, someone on the MSRC faculty has personal, first-hand knowledge of the capabilities of the proposed, adjunct instructor. This is the case for Smithtown High School; the adjunct instructors are already experienced and two are MSRC alumni. In the future, however, other schools may wish to participate. If the demand grows substantially, it may be that a summer training session or a special SPD course to prepare adjunct instructors will be needed. We anticipate that training sessions would take the form of five days of instruction. These might be run over consecutive days, perhaps in the summer, or over, say five consecutive Saturdays, or, perhaps, as an on-line course in the School of professional Development. Candidates for status of adjunct instructors would be required to hold a Master's degree, to three years teaching experience, and to secure the recommendation of their school principal or department chair. The instructor-of-record can grant temporary approval of adjuncts as they work towards the completion of the necessary requirements. It is premature at this stage to specify the exact logistics of training workshops when the assessment of adjuncts can be done on a case-by-case basis.